

README File for Criteria Assessment Source Code

Jeni Keisman, Chesapeake Bay Program Office
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The file `assessment_code.zip` contains all Fortran source code (`code/src` folder), libraries (`code/lib` folder), parameter files (`code/lib` folder), scripts (`scripts/` folder) and compiled executables (`code/bin` folder) contained on the system set up to conduct dissolved oxygen and chlorophyll a assessment in the Spring and Summer of 2010, for the purposes of developing the 2010 Chesapeake Bay TMDL.

The logic and parameter files used in criteria assessment can be discerned and verified (if you are familiar with basic programming principles and the fortran language) by reading the source code files, along with the documentation files provided in this folder. Start with the "scripts" folder, and follow the order of execution listed in the "Instructions" file to discern the order of execution.

These files are NOT in a format that allows straightforward setup, compilation, and running of criteria assessment.

A brief overview of the assessment procedure used for 303(d) listing is provided in Appendix A of the document "Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll *a* for the Chesapeake Bay and Its Tidal Tributaries: 2008 Technical Support for Criteria Assessment Protocols Addendum", available at: http://www.chesapeakebay.net/content/publications/cbp_47637.pdf

A document containing a more technical explanation of the procedure is included here, as filename "Dissolved Oxygen Criteria Assessment Procedure Sept 2010.pdf".

If your goal is to set up and run executables to perform criteria assessment, contact Jeni Keisman, UMCES Assistant Research Scientist at the EPA Chesapeake Bay Program Office (jkeisman@chesapeakebay.net).